

disorder (OR 20.1; CI 12.3-33.1) significantly increased the use of antipsychotic medication in children with ADHD. **CONCLUSIONS:** Stimulants remained the mainstay of treatment for ADHD in children, although its use decreased after 2006 which is consistent with other studies. Antipsychotic use was less common but increased significantly in recent years.

PMH12

IMPACT OF POLYDRUG USE ON PRESCRIPTION DRUG ABUSE

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OBJECTIVES: Prescription drug abuse has emerged as a major public health threat over the past decade. The role of polydrug use (PDU) of psychotherapeutic drugs is currently not well understood in prescription drug abuse (defined as nonmedical use of prescription drugs-NMUPD). This study aims to characterize NMUPD and examine the role of PDU in contributing to prescription drug abuse. **METHODS:** The National Survey of Drug Use and Health (NSDUH-2010) was utilized to study a population of noninstitutionalized, civilian Americans, aged 12 years and over for NMUPD. NMUPD was defined as the act of consuming a drug from any of the four drug classes (pain relievers, stimulants, tranquilizers and sedatives) without a valid prescription or with a prescription for the experience or feeling it caused. PDU was defined as the use of two or more prescription psychotherapeutic drugs within the past one year. Associations between PDU and NMUPD were tested with respect to demographic and socioeconomic factors. **RESULTS:** Out of a sample of 5166 individuals who were taking psychotherapeutic drugs, about 29% (n=1493) were engaged in PDU. About 4.47% (n=231) of the sample fit the criteria for NMUPD. About 6.50% (n=97) of the PDU sample (n=1493) were engaged in NMUPD. NMUPD was found to be more common among polydrug-users than monodrug-users (6.5% vs. 3.65%). A Chi-Square test for independence showed a significant association between PDU and NMUPD ($\chi^2=20.167$, $p<0.0001$). Demographically, a majority of the polydrug-users with NMUPD were in the age-group 18-25 years (55%), female (54.64%), single (83.51%), nonhispanic white (77.32%), with high school graduation (60.82%) and income less than \$10,000 annually (68.04%). **CONCLUSIONS:** PDU is a notable and legitimate risk factor for NMUPD. NMUPD among polydrug-users appears to be more prevalent in a population that is young, mostly female, nonhispanic white, with limited income and education.

PMH13

PREDICTORS OF USE OF ATYPICAL ANTIPSYCHOTICS AND LONG ACTING STIMULANTS POLYPHARMACY AMONG CHILDREN AND ADOLESCENTS WITH ATTENTION DEFICIT HYPERACTIVITY DISORDER

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OBJECTIVES: Psychotropic polypharmacy is common in pediatric Attention Deficit/Hyperactivity Disorder (ADHD). This study examined determinants of the long acting stimulant (LAS) and atypical antipsychotic (AAP) polypharmacy in children and adolescents with ADHD. **METHODS:** This study used 4 years (January 2004 to December 2007) of IMS LifeLink™ claims data involving 6-16 years old children with ADHD and at least one LAS prescription between July 2004 to December 2006 and continuous eligibility 6 months before and 1 years after the index LAS prescription. Polypharmacy was defined as the concurrent prescription for LASs and AAPs for at least 14 days within the 365 days after the index LAS claim. Multiple logistic regression analysis was performed to examine predictors of LASs and AAPs polypharmacy in pediatric ADHD. **RESULTS:** The study cohort consisted of 39,981 children and adolescents. Of these, 1,560 (3.90%) received LAS and AAP polypharmacy and the rest 38,421 (96.10%) received LAS monotherapy. Multivariate logistic regression analysis revealed that factors positively associated with psychotropic polypharmacy were: male, year of cohort entry (2005 and 2006), initiation of LAS in summer, psychiatrist visit, depression, conduct disorder, enuresis, tics, bipolar disorder, oppositional disruptive disorder, psychosis and pervasive developmental disorders, use of psychotropic medications from other drug class such as α 2-agonists, antidepressants, mood stabilizers and other miscellaneous medications, and mental health-related hospital visit in the past 6 months. Children with public health insurance, those residing in Midwest and West regions, those who initiated use of index LAS in spring, those seen by pediatrician, and those with comorbidity of substance abuse and dependence were less likely to receive LAS and AAP polypharmacy. **CONCLUSIONS:** Various patient, clinical and treatment factors were associated with the receipt of polypharmacy among ADHD youths. Understanding of these factors can help to manage psychotropic polypharmacy and improve quality of care in pediatric ADHD.

PMH14

CONCURRENT STIMULANT AND ATYPICAL ANTIPSYCHOTIC USE AMONG MEDICAID CHILDREN AND ADOLESCENTS WITH ATTENTION DEFICIT/HYPERACTIVITY DISORDER

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OBJECTIVES: The study examined the prevalence and factors associated with concurrent use of long acting stimulants (LAS) and atypical antipsychotic agents among children and adolescents who initiated LAS medications for Attention Deficit/Hyperactivity Disorder (ADHD). **METHODS:** The study involved retrospective longitudinal analysis of 2003-2007 Medicaid Analytical eXtract (MAX) data of four US states. The study focused on children and adolescents aged 6 to 17 years, diagnosed with ADHD, and who initiated LAS from July 2003 to December 2006. Concurrent use was defined as receipt of both medications together at least for 14 days. The study cohort was followed uniformly for one

year after the initiation of LAS medications to examine the concurrent use. Descriptive analysis was conducted to examine the utilization pattern. Multiple logistic regression analysis within the conceptual framework of Andersen behavioral model was conducted to examine determinants of concurrent use with LAS use only as a reference group. **RESULTS:** Among the 61,793 children and adolescents who initiated ADHD treatment with LAS, 11, 866 (19.20%) received LAS and atypical antipsychotics concurrently. Risperidone was frequently used concurrently with LAS in children. The multiple logistic regression revealed that children and adolescents with male gender, black race, and foster care benefits were more likely to receive LAS and atypical antipsychotics concurrently than their counterparts. Moreover, FDA approved indications such as schizophrenia, bipolar disorder, and psychosis and non-approved indications such as oppositional defiant disorder, pervasive developmental disorder, tic disorder, and personality disorder determined the concurrent use. **CONCLUSIONS:** Almost 1 in 5 children and adolescent received LAS and atypical antipsychotics concurrently. In addition to FDA approved indications, non-approved indications determined the concurrent use. There is urgent need to evaluate the safety and efficacy of concurrent use of LAS and atypical antipsychotics in children and adolescents for various indications.

PMH15

PREVALENCE OF DEPRESSIVE SYMPTOMS AND PREDICTORS OF TREATMENT AMONG ADULTS FROM 2005 TO 2010 IN THE UNITED STATES

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OBJECTIVES: Depression is a major public health concern with significant patient and societal burden. However, many patients with depressive symptoms do not receive treatment. This study examined nationally representative estimates of the prevalence of depressive symptoms and factors associated with treatment. **METHODS:** A cross-sectional, retrospective analysis of adults age ≥ 18 represented in the 2005-2010 National Health and Nutrition Examination Survey (NHANES) data (n=15,838; weighted n=194,685,449) who responded to the Patient Health Questionnaire (PHQ-9) was conducted. Depressive symptoms were defined by PHQ-9 score ≥ 5 . Depression treatment was defined as receiving either antidepressants or psychotherapy. Multivariate logistic regression analyses using population weights were performed to identify factors associated with having depressive symptoms. Among the group of patients with moderate to severe depression, similar models assessed factors associated with receipt of treatment. **RESULTS:** The prevalence of depressive symptoms increased gradually from 2005-2010 (21.4% in 2005-2006; 25.6% in 2007-2008; and 26.1% in 2009-2010). Among patients with moderate to severe depressive symptoms, over one-third (weighted n=6,132,302; 37.0%) received either antidepressants or psychotherapy treatment. Multivariate results found that comorbidities (high blood pressure, diabetes, asthma, arthritis, heart failure, stroke, COPD, and obesity), previous hospitalization, having no health insurance, seeing a mental professional, receiving antipsychotic drugs, female, Hispanic ethnicity, in poverty status, and age of 20-59 (vs. age <20) were significant factors associated with having depressive symptoms ($P<0.05$). Among patients with moderate to severe depression, comorbidities (asthma and cancer), seeing a mental professional, receiving antipsychotic drugs, female, and Non-Hispanic White race were statistically significantly associated with receipt of treatment ($P<0.05$). **CONCLUSIONS:** Although the prevalence of depression symptoms is high and growing in the U.S. population, only a small portion of patients with moderate to severe depression received treatments. Additionally, significant disparities by ethnicity and use of mental professionals appear to be associated with the likelihood of receiving treatment.

PMH16

IMPACT OF ATYPICAL ANTIPSYCHOTIC USE ON THE PERSISTENCE OF THE STIMULANT TREATMENT IN CHILDREN AND ADOLESCENTS WITH ATTENTION DEFICIT/HYPERACTIVITY DISORDER

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OBJECTIVES: To examine the impact of atypical antipsychotic use on the persistence of long acting stimulants (LAS) in children and adolescents with Attention Deficit/Hyperactivity Disorder (ADHD). **METHODS:** The study involved retrospective longitudinal analysis of 2003-2007 Medicaid Analytical eXtract (MAX) data of four US states. The study focused on children and adolescents aged 6 to 17 years, diagnosed with ADHD, and who initiated LAS after 6 months washout period. Concurrent use was defined as receipt of both medications together at least for 14 days. The persistence of LAS was defined as number of days to discontinuation of index LAS. The patients were censored at the discontinuation of index LAS or end of study period whichever comes first. Descriptive analysis was used to examine demographic, service related, and clinical characteristics of study sample. Accelerated Failure Time (AFT) regression was conducted to examine the determinants of persistence of LAS. **RESULTS:** Among the 61,793 children and adolescents who initiated LAS for ADHD 9,902 (16.03%) received LAS and atypical antipsychotic concurrently. Most of the study sample was children aged between 6-12 years, males, and whites. The mean duration of LAS treatment was longer (200 days) among concurrent users than only LAS users (143 days). The AFT regression found that concurrent users had 45% longer (STR, 1.45; 95% CI, 1.41-1.49) LAS persistence than those using LAS only. Adolescents and non-whites had shorter LAS treatment persistence than their counterparts after controlling for demographics, service related, and clinical factors. **CONCLUSIONS:** The concurrent users had longer LAS treatment continuity than LAS only users. The addition of the atypical